



Terms used: [texture](#) [axis](#) [invert](#) [coordinate](#) [cube map](#) [environmental map](#) [environment map](#) [reflection map](#)

Found 161 of 204,472

Sort results
by

relevance

[Save results to a Binder](#)

[Try an Advanced Search](#)

Display
results

expanded form

[Search Tips](#)

[Try this search in The ACM Guide](#)

[Open results in a new window](#)

Results 1 - 20 of 161

Result page: **1** [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [next](#)

Relevance scale

1 [Realistic materials in computer graphics: Realistic materials in computer graphics](#)

Hendrik P. A. Lensch, Michael Goesele, Yung-Yu Chuang, Tim Hawkins, Steve Marschner, Wojciech Matusik, Gero Mueller
July 2005 **ACM SIGGRAPH 2005 Courses SIGGRAPH '05**

Publisher: ACM Press

Full text available: [pdf\(18.24 MB\)](#) Additional Information: [full citation](#), [references](#)



2 [Real-time shading](#)

Marc Olano, Kurt Akeley, John C. Hart, Wolfgang Heidrich, Michael McCool, Jason L. Mitchell, Randi Rost
August 2004 **ACM SIGGRAPH 2004 Course Notes SIGGRAPH '04**

Publisher: ACM Press

Full text available: [pdf\(7.39 MB\)](#) Additional Information: [full citation](#), [abstract](#)



Real-time procedural shading was once seen as a distant dream. When the first version of this course was offered four years ago, real-time shading was possible, but only with one-of-a-kind hardware or by combining the effects of tens to hundreds of rendering passes. Today, almost every new computer comes with graphics hardware capable of interactively executing shaders of thousands to tens of thousands of instructions. This course has been redesigned to address today's real-time shading capabili ...

3 [High dynamic range imaging](#)

Paul Debevec, Erik Reinhard, Greg Ward, Sumanta Pattanaik
August 2004 **ACM SIGGRAPH 2004 Course Notes SIGGRAPH '04**

Publisher: ACM Press

Full text available: [pdf\(20.22 MB\)](#) Additional Information: [full citation](#), [abstract](#)



Current display devices can display only a limited range of contrast and colors, which is one of the main reasons that most image acquisition, processing, and display techniques use no more than eight bits per color channel. This course outlines recent advances in high-dynamic-range imaging, from capture to display, that remove this restriction, thereby enabling images to represent the color gamut and dynamic range of the original scene rather than the limited subspace imposed by current monitor ...

4 [Real-time volume graphics](#)

 Klaus Engel, Markus Hadwiger, Joe M. Kniss, Aaron E. Lefohn, Christof Rezk Salama, Daniel Weiskopf

August 2004 **ACM SIGGRAPH 2004 Course Notes SIGGRAPH '04**

Publisher: ACM Press

Full text available:  [pdf\(7.63 MB\)](#) Additional Information: [full citation](#), [abstract](#)

The tremendous evolution of programmable graphics hardware has made high-quality real-time volume graphics a reality. In addition to the traditional application of rendering volume data in scientific visualization, the interest in applying these techniques for real-time rendering of atmospheric phenomena and participating media such as fire, smoke, and clouds is growing rapidly. This course covers both applications in scientific visualization, e.g., medical volume data, and real-time rendering, ...

5 A signal-processing framework for reflection

 Ravi Ramamoorthi, Pat Hanrahan

October 2004 **ACM Transactions on Graphics (TOG)**, Volume 23 Issue 4

Publisher: ACM Press

Full text available:  [pdf\(272.24 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

We present a signal-processing framework for analyzing the reflected light field from a homogeneous convex curved surface under distant illumination. This analysis is of theoretical interest in both graphics and vision and is also of practical importance in many computer graphics problems---for instance, in determining lighting distributions and bidirectional reflectance distribution functions (BRDFs), in rendering with environment maps, and in image-based rendering. It is well known that und ...

Keywords: BRDF, Fourier analysis, environment maps, illumination, inverse rendering, reflection, signal processing, spherical harmonics

6 Reflection space image based rendering

 Brian Cabral, Marc Olano, Philip Nemec

July 1999 **Proceedings of the 26th annual conference on Computer graphics and interactive techniques SIGGRAPH '99**

Publisher: ACM Press/Addison-Wesley Publishing Co.

Full text available:  [pdf\(6.11 MB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

Keywords: image based rendering, interactive rendering and shading, reflection mapping, texture mapping

7 Surface modeling and parameterization with manifolds: Surface modeling and

 parameterization with manifolds: Siggraph 2006 course notes

Author presentation videos are available from the citation page

Cindy Grimm, Denis Zorin

July 2006 **ACM SIGGRAPH 2006 Courses SIGGRAPH '06**

Publisher: ACM Press

Full text available:  [pdf\(17.85 MB\)](#)  [mov\(251.00 bytes\)](#) Additional Information: [full citation](#), [appendices and supplements](#), [abstract](#), [references](#)

Many diverse applications in different areas of computer graphics, including geometric modeling, rendering and animation, require dealing with sets which cannot be easily represented with a single function on a simple domain in a Euclidean space: Examples

include surfaces of nontrivial topology, environment maps, reflection/transmission functions, light fields, configuration spaces of animation skeletons, and others. In most cases these objects are described as collections of functions defined on ...

8 Manifolds and modeling: Surface modeling and parameterization with manifolds

 Cindy Grimm, Denis Zorin

July 2005 **ACM SIGGRAPH 2005 Courses SIGGRAPH '05**

Publisher: ACM Press

Full text available:  [pdf\(6.69 MB\)](#) Additional Information: [full citation](#), [references](#)



9 An open-source CVE for programming education: a case study: An open-source CVE

 [for programming education: a case study](#)

Andrew M. Phelps, Christopher A. Egert, Kevin J. Bierre, David M. Parks

July 2005 **ACM SIGGRAPH 2005 Courses SIGGRAPH '05**

Publisher: ACM Press

Full text available:  [pdf\(7.92 MB\)](#) Additional Information: [full citation](#), [references](#)



10 GPGPU: general purpose computation on graphics hardware

 David Luebke, Mark Harris, Jens Krüger, Tim Purcell, Naga Govindaraju, Ian Buck, Cliff Woolley, Aaron Lefohn

August 2004 **ACM SIGGRAPH 2004 Course Notes SIGGRAPH '04**

Publisher: ACM Press

Full text available:  [pdf\(63.03 MB\)](#) Additional Information: [full citation](#), [abstract](#), [citations](#)



The graphics processor (GPU) on today's commodity video cards has evolved into an extremely powerful and flexible processor. The latest graphics architectures provide tremendous memory bandwidth and computational horsepower, with fully programmable vertex and pixel processing units that support vector operations up to full IEEE floating point precision. High level languages have emerged for graphics hardware, making this computational power accessible. Architecturally, GPUs are highly parallel systems ...

11 A first-order analysis of lighting, shading, and shadows

 Ravi Ramamoorthi, Dhruv Mahajan, Peter Belhumeur

January 2007 **ACM Transactions on Graphics (TOG)**, Volume 26 Issue 1

Publisher: ACM Press

Full text available:  [pdf\(7.17 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)



The shading in a scene depends on a combination of many factors---how the lighting varies spatially across a surface, how it varies along different directions, the geometric curvature and reflectance properties of objects, and the locations of soft shadows. In this article, we conduct a complete first-order or gradient analysis of lighting, shading, and shadows, showing how each factor separately contributes to scene appearance, and when it is important. Gradients are well-suited to analyzing the ...

Keywords: Fourier analysis, Gradients, reflectance, shadows



12 Real-time shadowing techniques

 Tomas Akenine-Moeller, Eric Chan, Wolfgang Heidrich, Jan Kautz, Mark Kilgard, Marc Stamminger

August 2004 **ACM SIGGRAPH 2004 Course Notes SIGGRAPH '04**



Publisher: ACM Press

Full text available:  pdf(11.17 MB) Additional Information: [full citation](#), [abstract](#)

Shadows heighten realism and provide important visual cues about the spatial relationships between objects. But integration of robust shadow shadowing techniques in real-time rendering is not an easy task. In this course on how shadows are incorporated in real-time rendering, attendees learn basic shadowing techniques and more advanced techniques that exploit new features of graphics hardware. The course begins with shadowing techniques using shadow maps. After an introduction to shadow maps and ...

13 Steerable illumination textures

 Michael Ashikhmin, Peter Shirley

January 2002 **ACM Transactions on Graphics (TOG)**, Volume 21 Issue 1

Publisher: ACM Press

Full text available:  pdf(4.52 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

We introduce a new set of illumination basis functions designed for lighting bumpy surfaces. This lighting includes shadowing and interreflection. To create an image with a new light direction, only a linear combination of precomputed textures is required. This is possible by using a carefully selected set of steerable basis functions. Steerable basis lights have the property that they allow lights to move continuously without jarring visual artifacts. The new basis lights are shown to produce i ...

Keywords: Bump mapping, displacement mapping, relighting, steerable functions, textures

14 A simple model of ocean waves

 Alain Fournier, William T. Reeves

August 1986 **ACM SIGGRAPH Computer Graphics , Proceedings of the 13th annual conference on Computer graphics and interactive techniques SIGGRAPH '86**, Volume 20 Issue 4

Publisher: ACM Press

Full text available:  pdf(4.11 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

We present a simple model for the surface of the ocean, suitable for the modeling and rendering of most common waves where the disturbing force is from the wind and the restoring force from gravity. It is based on the Gerstner, or Rankine, model where particles of water describe circular or elliptical stationary orbits. The model can easily produce realistic waves shapes which are varied according to the parameters of the orbits. The surface of the ocean floor affects the refraction and the break ...

15 Environment matting extensions: towards higher accuracy and real-time capture

 Yung-Yu Chuang, Douglas E. Zongker, Joel Hindorff, Brian Curless, David H. Salesin, Richard Szeliski

July 2000 **Proceedings of the 27th annual conference on Computer graphics and interactive techniques SIGGRAPH '00**

Publisher: ACM Press/Addison-Wesley Publishing Co.

Full text available:  pdf(1.48 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Environment matting is a generalization of traditional bluescreen matting. By photographing an object in front of a sequence of structured light backdrops, a set of approximate light-transport paths through the object can be computed. The original environment matting research chose a middle ground—using a moderate number of photographs to produce results that were reasonably accurate for many objects. In this

work, we extend the technique in two opposite directions: recovering a more ...

Keywords: alpha channel, augmented reality, blue spill, blue-screen matting, clip art, colored transparency, environment map, environment matte, image-based rendering, real-time capture, reflection, refraction

16 Abstraction: X-toon: an extended toon shader

 Pascal Barla, Joëlle Thollot, Lee Markosian

June 2006 **Proceedings of the 4th international symposium on Non-photorealistic animation and rendering NPAR '06**

Publisher: ACM Press

Full text available:  [pdf\(438.31 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Traditional toon shading uses a 1D texture that describes how tone varies with surface orientation relative to a given light source. In this paper we describe two extensions to the basic algorithm that support view-dependent effects. First, we replace the 1D texture with a 2D texture whose second dimension corresponds to the desired "tone detail," which can vary with depth or surface orientation. This supports effects such as levels-of-abstraction, aerial perspective, depth-of-field, backlighting ...

17 Lightcuts: a scalable approach to illumination

 Bruce Walter, Sebastian Fernandez, Adam Arbree, Kavita Bala, Michael Donikian, Donald P. Greenberg

July 2005 **ACM Transactions on Graphics (TOG) , ACM SIGGRAPH 2005 Papers SIGGRAPH '05**, Volume 24 Issue 3

Publisher: ACM Press

Full text available:  [pdf\(683.53 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)
 [mov\(26:17 MIN\)](#)

Lightcuts is a scalable framework for computing realistic illumination. It handles arbitrary geometry, non-diffuse materials, and illumination from a wide variety of sources including point lights, area lights, HDR environment maps, sun/sky models, and indirect illumination. At its core is a new algorithm for accurately approximating illumination from many point lights with a strongly *sublinear* cost. We show how a group of lights can be cheaply approximated while bounding the maximum appr ...

Keywords: many lights, raytracing, shadowing

18 Efficient BRDF importance sampling using a factored representation

 Jason Lawrence, Szymon Rusinkiewicz, Ravi Ramamoorthi

August 2004 **ACM Transactions on Graphics (TOG) , ACM SIGGRAPH 2004 Papers SIGGRAPH '04**, Volume 23 Issue 3

Publisher: ACM Press

Full text available:  [pdf\(398.48 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#)
 [mov\(24:59 MIN\)](#)

High-quality Monte Carlo image synthesis requires the ability to importance sample realistic BRDF models. However, analytic sampling algorithms exist only for the Phong model and its derivatives such as Lafontaine and Blinn-Phong. This paper demonstrates an importance sampling technique for a wide range of BRDFs, including complex analytic models such as Cook-Torrance and measured materials, which are being increasingly used for realistic image synthesis. Our approach is based on a compact factor ...

Keywords: BRDF, Global Illumination, Importance Sampling, Monte Carlo Integration, Ray Tracing, Rendering

19 Image-based material editing

 Erum Arif Khan, Erik Reinhard, Roland W. Fleming, Heinrich H. Bülthoff

July 2006 **ACM Transactions on Graphics (TOG) , ACM SIGGRAPH 2006 Papers**
SIGGRAPH '06, Volume 25 Issue 3

Publisher: ACM Press

Full text available:  [pdf\(608.70 KB\)](#)

 [mov\(20:2 MIN\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Photo editing software allows digital images to be blurred, warped or re-colored at the touch of a button. However, it is not currently possible to change the material appearance of an object except by painstakingly painting over the appropriate pixels. Here we present a method for automatically replacing one material with another, completely different material, starting with only a single high dynamic range image as input. Our approach exploits the fact that human vision is surprisingly tolerant ...

Keywords: high dynamic range imaging, image-based lighting, image-based material editing

20 Real-time BRDF editing in complex lighting

 Aner Ben-Artzi, Ryan Overbeck, Ravi Ramamoorthi

July 2006 **ACM Transactions on Graphics (TOG) , ACM SIGGRAPH 2006 Papers**
SIGGRAPH '06, Volume 25 Issue 3

Publisher: ACM Press

Full text available:  [pdf\(1.03 MB\)](#)

 [mov\(24:10 MIN\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Current systems for editing BRDFs typically allow users to adjust analytic parameters while visualizing the results in a simplified setting (e.g. unshadowed point light). This paper describes a real-time rendering system that enables interactive edits of BRDFs, as rendered in their final placement on objects in a static scene, lit by direct, complex illumination. All-frequency effects (ranging from near-mirror reflections and hard shadows to diffuse shading and soft shadows) are rendered using a ...

Results 1 - 20 of 161

Result page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [next](#)

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2007 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)

Terms used: [texture](#) [axis](#) [swap](#) [coordinate](#) [cube map](#)
[environmental map](#) [environment map](#) [reflection map](#)

Found 58 of 204,472

Sort results
by

relevance 

[Save results to a Binder](#)

[Try an Advanced Search](#)

Display
results

expanded form 

[Search Tips](#)

[Try this search in The ACM Guide](#)

[Open results in a new window](#)

Results 1 - 20 of 58

Result page: **1** [2](#) [3](#) [next](#)

Relevance scale 

1 Realistic materials in computer graphics: Realistic materials in computer graphics 

 Hendrik P. A. Lensch, Michael Goesele, Yung-Yu Chuang, Tim Hawkins, Steve Marschner, Wojciech Matusik, Gero Mueller
 July 2005 **ACM SIGGRAPH 2005 Courses SIGGRAPH '05**

Publisher: ACM Press

Full text available:  [pdf\(18.24 MB\)](#) Additional Information: [full citation](#), [references](#)

2 Real-time shading 

 Marc Olano, Kurt Akeley, John C. Hart, Wolfgang Heidrich, Michael McCool, Jason L. Mitchell, Randi Rost
 August 2004 **ACM SIGGRAPH 2004 Course Notes SIGGRAPH '04**

Publisher: ACM Press

Full text available:  [pdf\(7.39 MB\)](#) Additional Information: [full citation](#), [abstract](#)

Real-time procedural shading was once seen as a distant dream. When the first version of this course was offered four years ago, real-time shading was possible, but only with one-of-a-kind hardware or by combining the effects of tens to hundreds of rendering passes. Today, almost every new computer comes with graphics hardware capable of interactively executing shaders of thousands to tens of thousands of instructions. This course has been redesigned to address today's real-time shading capabili ...

3 Real-time volume graphics 

 Klaus Engel, Markus Hadwiger, Joe M. Kniss, Aaron E. Lefohn, Christof Rezk Salama, Daniel Weiskopf
 August 2004 **ACM SIGGRAPH 2004 Course Notes SIGGRAPH '04**

Publisher: ACM Press

Full text available:  [pdf\(7.63 MB\)](#) Additional Information: [full citation](#), [abstract](#)

The tremendous evolution of programmable graphics hardware has made high-quality real-time volume graphics a reality. In addition to the traditional application of rendering volume data in scientific visualization, the interest in applying these techniques for real-time rendering of atmospheric phenomena and participating media such as fire, smoke, and clouds is growing rapidly. This course covers both applications in scientific visualization, e.g., medical volume data, and real-time rendering, ...

4 Session F2: VR modeling: geometry and texture: Double projective cylindrical texture 

 mapping on FPGA

Xiaoying Li, Baoquan Liu, Enhua Wu

June 2006 **Proceedings of the 2006 ACM international conference on Virtual reality continuum and its applications VRCIA '06**

Publisher: ACM Press

Full text available:  [pdf\(329.36 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Image-based modeling and rendering (IBMR) techniques have been used to construct three-dimensional virtual scenes applied for VR applications by warping several two-dimensional images with depth information. In this paper, a novel approach of IBMR with depth information called double projective cylindrical texture mapping method (DPCM) is presented and implemented on an FPGA hardware platform. By the approach, based on a virtual double projective cylindrical camera model, the rendered scene is f ...

Keywords: FPGA, depth image, graphics hardware, image warping, image-based rendering

5 An open-source CVE for programming education: a case study: An open-source CVE 

 for programming education: a case study

Andrew M. Phelps, Christopher A. Eget, Kevin J. Bierre, David M. Parks

July 2005 **ACM SIGGRAPH 2005 Courses SIGGRAPH '05**

Publisher: ACM Press

Full text available:  [pdf\(7.92 MB\)](#) Additional Information: [full citation](#), [references](#)

6 GPGPU: general purpose computation on graphics hardware 

 David Luebke, Mark Harris, Jens Krüger, Tim Purcell, Naga Govindaraju, Ian Buck, Cliff Woolley, Aaron Lefohn

August 2004 **ACM SIGGRAPH 2004 Course Notes SIGGRAPH '04**

Publisher: ACM Press

Full text available:  [pdf\(63.03 MB\)](#) Additional Information: [full citation](#), [abstract](#), [citations](#)

The graphics processor (GPU) on today's commodity video cards has evolved into an extremely powerful and flexible processor. The latest graphics architectures provide tremendous memory bandwidth and computational horsepower, with fully programmable vertex and pixel processing units that support vector operations up to full IEEE floating point precision. High level languages have emerged for graphics hardware, making this computational power accessible. Architecturally, GPUs are highly parallel s ...

7 "The Chronicles of Narnia": the lion, the crowds, and rhythm & hues: The Chronicles 

 of Narnia: the lion, the crowds and rhythm and hues

Author video presentations are available from the citation page

Brad Hiebert, Jubin Dave, Tae-Yong Kim, Ivan Neulander, Hans Rijpkema, Will Telford

July 2006 **ACM SIGGRAPH 2006 Courses SIGGRAPH '06**

Publisher: ACM Press

Full text available:  [pdf\(3.41 MB\)](#) Additional Information: [full citation](#), [appendices and supplements](#), [abstract](#)

For almost 2 decades Rhythm and Hues Studios has been using its proprietary software pipeline to create photo real characters for films and commercials. However, the demands of "The Chronicles of Narnia" forced a fundamental reevaluation of the studio's existing pipeline and procedures. The requirements of Aslan and the thousands of mythological creatures presented a variety of technical issues that necessitated new solutions and

changes in the work flow of almost every department in the studio. ...

8 Architectures: PixelView: a view-independent graphics rendering architecture

 J. Stewart, E. P. Bennett, L. McMillan

August 2004 **Proceedings of the ACM SIGGRAPH/EUROGRAPHICS conference on Graphics hardware HWWS '04**

Publisher: ACM Press

Full text available:  [pdf\(308.40 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

We present a new computer graphics rendering architecture that allows "all possible views" to be extracted from a single traversal of a scene description. It supports a wide range of rendering primitives, including polygonal meshes, higher-order surface primitives (e.g. spheres, cylinders, and parametric patches), point-based models, and image-based representations. To demonstrate our concept, we have implemented a hardware prototype that includes a 4D, z-buffered frame-buffer supporting dynamic ...

9 The elements of nature: interactive and realistic techniques

 Oliver Deussen, David S. Ebert, Ron Fedkiw, F. Kenton Musgrave, Przemyslaw Prusinkiewicz, Doug Roble, Jos Stam, Jerry Tessendorf

August 2004 **ACM SIGGRAPH 2004 Course Notes SIGGRAPH '04**

Publisher: ACM Press

Full text available:  [pdf\(17.65 MB\)](#) Additional Information: [full citation](#), [abstract](#)

This updated course on simulating natural phenomena will cover the latest research and production techniques for simulating most of the elements of nature. The presenters will provide movie production, interactive simulation, and research perspectives on the difficult task of photorealistic modeling, rendering, and animation of natural phenomena. The course offers a nice balance of the latest interactive graphics hardware-based simulation techniques and the latest physics-based simulation techni ...

10 Hardware & systems: Media productions for a dome display system

 Athanasios Gaitatzes, Georgios Papaioannou, Dimitrios Christopoulos, Gjergji Zyba

November 2006 **Proceedings of the ACM symposium on Virtual reality software and technology VRST '06**

Publisher: ACM Press

Full text available:  [pdf\(2.51 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

As the interest of the public for new forms of media grows, museums and theme parks select real time Virtual Reality productions as their presentation medium. Based on three-dimensional graphics, interaction, sound, music and intense story telling they mesmerize their audiences. The Foundation of the Hellenic World (FHW) having opened so far to the public three different Virtual Reality theaters, is in the process of building a new Dome-shaped Virtual Reality theatre with a capacity of 130 peopl ...

Keywords: computer clusters, spherical display systems, stereoscopic display

11 Collision detection and proximity queries

 Sunil Hadap, Dave Eberle, Pascal Volino, Ming C. Lin, Stephane Redon, Christer Ericson

August 2004 **ACM SIGGRAPH 2004 Course Notes SIGGRAPH '04**

Publisher: ACM Press

Full text available:  [pdf\(11.22 MB\)](#) Additional Information: [full citation](#), [abstract](#)

This course will primarily cover widely accepted and proved methodologies in collision detection. In addition more advanced or recent topics such as continuous collision detection, ADFs, and using graphics hardware will be introduced. When appropriate the methods discussed will be tied to familiar applications such as rigid body and cloth

simulation, and will be compared. The course is a good overview for those developing applications in physically based modeling, VR, haptics, and robotics.

12 An interactive introduction to OpenGL programming

 Dave Shreiner, Ed Angel, Vicki Shreiner

August 2004 **ACM SIGGRAPH 2004 Course Notes SIGGRAPH '04**

Publisher: ACM Press

Full text available:  [pdf\(3.35 MB\)](#) Additional Information: [full citation](#), [abstract](#)

"An Interactive Introduction to OpenGL Programming" provides an overview of the OpenGL Application Programming Interface (API), a library of subroutines for drawing three-dimensional objects and images on a computer. After the completion of the course, a programmer able to write simple programs in the "C" language will be able to create an OpenGL application that has moving 3D objects that look like they are being lit by lights in the scene and by specifying colors or images that should be used ...

13 Recreational computer graphics: Recreational computer graphics

 Andrew Glassner

July 2006 **ACM SIGGRAPH 2006 Courses SIGGRAPH '06**

Publisher: ACM Press

Full text available:  [pdf\(13.82 MB\)](#) Additional Information: [full citation](#), [abstract](#)

Computer graphics isn't just a bunch of algorithms and programs: it's a gymnasium for the visual imagination, and a tool for investigating the world around us. Graphics can help us understand nature, invent new kinds of patterns and shapes, build up the clarity of our own mind's eye, and experiment with construction tools that would inspire even the most classical sculptors and painters. Going beyond tools and technique, this course invites attendees to think about using computer graphics in new ...

14 Painting detail

 Nathan A. Carr, John C. Hart

August 2004 **ACM Transactions on Graphics (TOG) , ACM SIGGRAPH 2004 Papers SIGGRAPH '04, Volume 23 Issue 3**

Publisher: ACM Press

Full text available:  [pdf\(25.68 MB\)](#)  [mov\(25:32 MIN\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#)

Surface painting is a technique that allows a user to paint a texture directly onto a surface, usually with a texture atlas: a 1:1 mapping between the surface and its texture image. Many good automatic texture atlas generation methods exist that evenly distribute texture samples across a surface based on its area and/or curvature, and some are even sensitive to the frequency spectrum of the input texture. However, during the surface painting process, the texture can change non-uniformly and unpr ...

Keywords: 3D painting, Mesh parametrization, face clustering, texture atlas

15 Novel parallel hardware platforms: Data buffering optimization methods toward a

 uniform programming interface for gpu-based applications

Shinichi Yamagiwa, Leonel Sousa, Diogo Antão

May 2007 **Proceedings of the 4th international conference on Computing frontiers CF '07**

Publisher: ACM Press

Full text available:  [pdf\(248.91 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The massive computational power available in off-the shelf Graphics Processing Units (GPUs) can pave the way for its usage in general purpose applications. Current interfaces

to program GPU operation are still oriented towards graphics processing. This paper is focused in disparities on those programming interfaces and proposes an extension to of the recently developed Caravela library that supports streambased computation. This extension implements effective methods to counterbalance the dis ...

Keywords: DirectX, OpenGL, general purpose processing, graphics processing unit

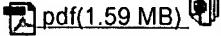
16 Interactive display of very large textures 

David Cline, Parris K. Egbert

October 1998 **Proceedings of the conference on Visualization '98 VIS '98**

Publisher: IEEE Computer Society Press

Full text available:



Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

[Publisher Site](#)

Keywords: bandwidth-limited resource, interactivity, real-time display, texture caching, texture mapping

17 GoLD: interactive display of huge colored and textured models 

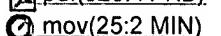
 Louis Borgeat, Guy Godin, François Blais, Philippe Massicotte, Christian Lahanier

July 2005 **ACM Transactions on Graphics (TOG) , ACM SIGGRAPH 2005 Papers**

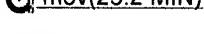
SIGGRAPH '05, Volume 24 Issue 3

Publisher: ACM Press

Full text available:



Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)



This paper presents a new technique for fast, view-dependent, real-time visualization of large multiresolution geometric models with color or texture information. This method uses geomorphing to smoothly interpolate between geometric patches composing a hierarchical level-of-detail structure, and to maintain seamless continuity between neighboring patches of the model. It combines the advantages of view-dependent rendering with numerous additional features: the high performance rendering associa ...

Keywords: geomorphing, level-of-detail, multi-resolution geometric modeling, out-of-core rendering, texture mapping, view-dependent rendering, visualization

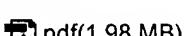
18 Image-driven simplification 

 Peter Lindstrom, Greg Turk

July 2000 **ACM Transactions on Graphics (TOG)**, Volume 19 Issue 3

Publisher: ACM Press

Full text available:



Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

We introduce the notion of image-driven simplification, a framework that uses images to decide which portions of a model to simplify. This is a departure from approaches that make polygonal simplification decisions based on geometry. As with many methods, we use the edge collapse operator to make incremental changes to a model. Unique to our approach, however, is the use at comparisons between images of the original model against those of a simplified model to determine the ...

Keywords: image metrics, level-of-detail, polygonal simplification, visual perception

19 [Accelerating 3D convolution using graphics hardware \(case study\)](#) 

Matthias Hopf, Thomas Ertl
October 1999 **Proceedings of the conference on Visualization '99: celebrating ten years VIS '99**

Publisher: IEEE Computer Society Press

Full text available:  [pdf\(637.86 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Many volume filtering operations used for image enhancement, data processing or feature detection can be written in terms of three-dimensional convolutions. It is not possible to yield interactive frame rates on todays hardware when applying such convolutions on volume data using software filter routines. As modern graphics workstations have the ability to render two-dimensional convoluted images to the frame buffer, this feature can be used to accelerate the process significantly. This way ...

Keywords: convolution, hardware acceleration, volume visualization

20 [InfiniteReality: a real-time graphics system](#) 

 John S. Montrym, Daniel R. Baum, David L. Dignam, Christopher J. Migdal
August 1997 **Proceedings of the 24th annual conference on Computer graphics and interactive techniques SIGGRAPH '97**

Publisher: ACM Press/Addison-Wesley Publishing Co.

Full text available:  [pdf\(697.27 KB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

Results 1 - 20 of 58

Result page: [1](#) [2](#) [3](#) [next](#)

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2007 ACM, Inc.
[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)



Terms used: **texture axis flip coordinate cube map environmental map environment map reflection map**

Found **62 of 204,472**

Sort results by

relevance

Save results to a Binder

Try an [Advanced Search](#)

Display results

expanded form

Search Tips

Try this search in [The ACM Guide](#)

Open results in a new window

Results 1 - 20 of 62

Result page: **1** [2](#) [3](#) [4](#) [next](#)

Relevance scale

1 [Surface modeling and parameterization with manifolds: Surface modeling and](#)



[parameterization with manifolds: Siggraph 2006 course notes](#)

Author presentation videos are available from the citation page

Cindy Grimm, Denis Zorin

July 2006 **ACM SIGGRAPH 2006 Courses SIGGRAPH '06**

Publisher: ACM Press

Full text available: [pdf\(17.85 MB\)](#)

Additional Information: [full citation](#), [appendices and supplements](#),
 [mov\(251.00 bytes\)](#) [abstract](#), [references](#)

Many diverse applications in different areas of computer graphics, including geometric modeling, rendering and animation, require dealing with sets which cannot be easily represented with a single function on a simple domain in a Euclidean space: Examples include surfaces of nontrivial topology, environment maps, reflection/transmission functions, light fields, configuration spaces of animation skeletons, and others. In most cases these objects are described as collections of functions defined o ...

2 [Session F2: VR modeling: geometry and texture: Double projective cylindrical texture](#)



[mapping on FPGA](#)

Xiaoying Li, Baoquan Liu, Enhua Wu

June 2006 **Proceedings of the 2006 ACM international conference on Virtual reality continuum and its applications VRCIA '06**

Publisher: ACM Press

Full text available: [pdf\(329.36 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Image-based modeling and rendering (IBMR) techniques have been used to construct three-dimensional virtual scenes applied for VR applications by warping several two-dimensional images with depth information. In this paper, a novel approach of IBMR with depth information called double projective cylindrical texture mapping method (DPCM) is presented and implemented on an FPGA hardware platform. By the approach, based on a virtual double projective cylindrical camera model, the rendered scene is f ...

Keywords: FPGA, depth image, graphics hardware, image warping, image-based rendering

3

[Manifolds and modeling: Surface modeling and parameterization with manifolds](#)



 Cindy Grimm, Denis Zorin

July 2005 **ACM SIGGRAPH 2005 Courses SIGGRAPH '05**

Publisher: ACM Press

Full text available:  [pdf\(6.69 MB\)](#) Additional Information: [full citation](#), [references](#)

4 An open-source CVE for programming education: a case study: An open-source CVE 

 [for programming education: a case study](#)

Andrew M. Phelps, Christopher A. Eger, Kevin J. Bierre, David M. Parks

July 2005 **ACM SIGGRAPH 2005 Courses SIGGRAPH '05**

Publisher: ACM Press

Full text available:  [pdf\(7.92 MB\)](#) Additional Information: [full citation](#), [references](#)

5 GPGPU: general purpose computation on graphics hardware 

 David Luebke, Mark Harris, Jens Krüger, Tim Purcell, Naga Govindaraju, Ian Buck, Cliff Woolley, Aaron Lefohn

August 2004 **ACM SIGGRAPH 2004 Course Notes SIGGRAPH '04**

Publisher: ACM Press

Full text available:  [pdf\(63.03 MB\)](#) Additional Information: [full citation](#), [abstract](#), [citations](#)

The graphics processor (GPU) on today's commodity video cards has evolved into an extremely powerful and flexible processor. The latest graphics architectures provide tremendous memory bandwidth and computational horsepower, with fully programmable vertex and pixel processing units that support vector operations up to full IEEE floating point precision. High level languages have emerged for graphics hardware, making this computational power accessible. Architecturally, GPUs are highly parallel s ...

6 Real-time shadowing techniques 

 Tomas Akenine-Moeller, Eric Chan, Wolfgang Heidrich, Jan Kautz, Mark Kilgard, Marc Stamminger

August 2004 **ACM SIGGRAPH 2004 Course Notes SIGGRAPH '04**

Publisher: ACM Press

Full text available:  [pdf\(11.17 MB\)](#) Additional Information: [full citation](#), [abstract](#)

Shadows heighten realism and provide important visual cues about the spatial relationships between objects. But integration of robust shadow shadowing techniques in real-time rendering is not an easy task. In this course on how shadows are incorporated in real-time rendering, attendees learn basic shadowing techniques and more advanced techniques that exploit new features of graphics hardware. The course begins with shadowing techniques using shadow maps. After an introduction to shadow maps and ...

7 High dynamic range texture compression for graphics hardware 

 Jacob Munkberg, Petrik Clarberg, Jon Hasselgren, Tomas Akenine-Möller

July 2006 **ACM Transactions on Graphics (TOG) , ACM SIGGRAPH 2006 Papers**

SIGGRAPH '06, Volume 25 Issue 3

Publisher: ACM Press

Full text available:  [pdf\(5.07 MB\)](#)  Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)
[mov\(17:57 MIN\)](#)

In this paper, we break new ground by presenting algorithms for fixed-rate compression of high dynamic range textures at low bit rates. First, the S3TC low dynamic range texture compression scheme is extended in order to enable compression of HDR data. Second, we introduce a novel robust algorithm that offers superior image quality. Our algorithm can be efficiently implemented in hardware, and supports textures with a

dynamic range of over 10⁹:1. At a fixed rate of 8 bits per pixel, w ...

Keywords: graphics hardware, high dynamic range images, image compression, texture compression

8 The definition and rendering of terrain maps

 Gavin S P Miller

August 1986 **ACM SIGGRAPH Computer Graphics , Proceedings of the 13th annual conference on Computer graphics and interactive techniques SIGGRAPH '86**, Volume 20 Issue 4

Publisher: ACM Press

Full text available:  [pdf\(8.43 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

This paper examines three methods, two existing and one new, for the generation of fractals based on recursive subdivision. Both existing methods are found to have defects, which are not present in the new method. A parallel processing algorithm is proposed for the rendering of height fields which is exact and distributes the load evenly between the processors. A method is described for the 'fan-tracing' of height fields to allow the realistic simulation of water reflections.

9 Rendering with concentric mosaics

 Heung-Yeung Shum, Li-Wei He

July 1999 **Proceedings of the 26th annual conference on Computer graphics and interactive techniques SIGGRAPH '99**

Publisher: ACM Press/Addison-Wesley Publishing Co.

Full text available:  [pdf\(1.44 MB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

Keywords: image-based rendering, plenoptic functions, virtual environments

10 Discrete conformal mappings via circle patterns

 Liliya Kharevych, Boris Springborn, Peter Schröder

April 2006 **ACM Transactions on Graphics (TOG)**, Volume 25 Issue 2

Publisher: ACM Press

Full text available:  [pdf\(1.21 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

We introduce a novel method for the construction of discrete conformal mappings from surface meshes of arbitrary topology to the plane. Our approach is based on *circle patterns*, that is, arrangements of circles---one for each face---with prescribed intersection angles. Given these angles, the circle radii follow as the unique minimizer of a convex energy. The method supports very flexible boundary conditions ranging from free boundaries to control of the boundary shape via prescribed curv ...

Keywords: Conformal parameterizations, circle patterns, discrete analytic functions, discrete differential geometry, meshing, texture mapping

11 Volume rendering: VIZARD II: a reconfigurable interactive volume rendering system

M. Meißner, U. Kanus, G. Wetekam, J. Hirche, A. Ehlert, W. Straßer, M. Doggett, P.

Forthmann, R. Proksa

September 2002 **Proceedings of the ACM SIGGRAPH/EUROGRAPHICS conference on Graphics hardware HWWS '02**

Publisher: Eurographics Association

Full text available: [pdf\(767.44 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

This paper presents a reconfigurable, hardware accelerated, volume rendering system for high quality perspective ray casting. The volume rendering accelerator performs ray casting by calculating the path of the ray through the volume using a programmable Xilinx Virtex FPGA which provides fast design changes and low cost development. Volume datasets are stored on the card in low profile DIMMs with standard connectors allowing both, large datasets up to 1 GByte with 32 bit per voxel, and easy upgr ...

12 Least squares conformal maps for automatic texture atlas generation

 Bruno Lévy, Sylvain Petitjean, Nicolas Ray, Jérôme MailLOT

July 2002 **ACM Transactions on Graphics (TOG) , Proceedings of the 29th annual conference on Computer graphics and interactive techniques SIGGRAPH**

'02, Volume 21 Issue 3

Publisher: ACM Press

Full text available: [pdf\(8.23 MB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

A Texture Atlas is an efficient color representation for 3D Paint Systems. The model to be textured is decomposed into charts homeomorphic to discs, each chart is parameterized, and the unfolded charts are packed in texture space. Existing texture atlas methods for triangulated surfaces suffer from several limitations, requiring them to generate a large number of small charts with simple borders. The discontinuities between the charts cause artifacts, and make it difficult to paint large areas w ...

Keywords: paint systems, polygonal modeling, texture mapping

13 Recreational computer graphics: Recreational computer graphics

 Andrew Glassner

July 2006 **ACM SIGGRAPH 2006 Courses SIGGRAPH '06**

Publisher: ACM Press

Full text available: [pdf\(13.82 MB\)](#) Additional Information: [full citation](#), [abstract](#)

Computer graphics isn't just a bunch of algorithms and programs: it's a gymnasium for the visual imagination, and a tool for investigating the world around us. Graphics can help us understand nature, invent new kinds of patterns and shapes, build up the clarity of our own mind's eye, and experiment with construction tools that would inspire even the most classical sculptors and painters. Going beyond tools and technique, this course invites attendees to think about using computer graphics in new ...

14 Shape-based retrieval and analysis of 3D models

 Thomas Funkhouser, Michael Kazhdan

August 2004 **ACM SIGGRAPH 2004 Course Notes SIGGRAPH '04**

Publisher: ACM Press

Full text available: [pdf\(12.56 MB\)](#) Additional Information: [full citation](#), [abstract](#)

Large repositories of 3D data are rapidly becoming available in several fields, including mechanical CAD, molecular biology, and computer graphics. As the number of 3D models grows, there is an increasing need for computer algorithms to help people find the interesting ones and discover relationships between them. Unfortunately, traditional text-based search techniques are not always effective for 3D models, especially when queries are geometric in nature (e.g., find me objects that fit into thi ...

15 Volume rendering: Accelerating volume rendering with texture hulls

Wei Li, Arie Kaufman

October 2002 **Proceedings of the 2002 IEEE symposium on Volume visualization and graphics VVS '02**

Publisher: IEEE Press

Full text available:  [pdf\(4.48 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Texture-mapping hardware has been successfully exploited for volume rendering. In this paper, we propose algorithms for texture-based volume rendering accelerated by texture hulls that avoid the transferring and compositing of empty voxels. We have developed methods that efficiently find all the bounding rectangles of the non-empty regions as well as the bounding contours that more accurately describe the borders of the non-empty regions. The bounding shapes are treated as the hulls of the non-e ...

Keywords: 2D texture-based volume rendering, bounding shapes, contour simplification, empty space skipping, graphics hardware, texture hulls

16 An interactive introduction to OpenGL programming

 Dave Shreiner, Ed Angel, Vicki Shreiner

August 2004 **ACM SIGGRAPH 2004 Course Notes SIGGRAPH '04**

Publisher: ACM Press

Full text available:  [pdf\(3.35 MB\)](#) Additional Information: [full citation](#), [abstract](#)

"An Interactive Introduction to OpenGL Programming" provides an overview of the OpenGL Application Programming Interface (API), a library of subroutines for drawing three-dimensional objects and images on a computer. After the completion of the course, a programmer able to write simple programs in the "C" language will be able to create an OpenGL application that has moving 3D objects that look like they are being lit by lights in the scene and by specifying colors or images that should be used ...

17 Texture mapping progressive meshes

 Pedro V. Sander, John Snyder, Steven J. Gortler, Hugues Hoppe

August 2001 **Proceedings of the 28th annual conference on Computer graphics and interactive techniques SIGGRAPH '01**

Publisher: ACM Press

Full text available:  [pdf\(5.18 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Given an arbitrary mesh, we present a method to construct a progressive mesh (PM) such that all meshes in the PM sequence share a common texture parametrization. Our method considers two important goals simultaneously. It minimizes texture stretch (small texture distances mapped onto large surface distances) to balance sampling rates over all locations and directions on the surface. It also minimizes texture deviation ("slippage" error based on parametric correspondence) to obtain ...

Keywords: mesh simplification, surface flattening, surface parametrization, texture stretch

18 Feature-based surface parameterization and texture mapping

 Eugene Zhang, Konstantin Mischaikow, Greg Turk

January 2005 **ACM Transactions on Graphics (TOG)**, Volume 24 Issue 1

Publisher: ACM Press

Full text available:  [pdf\(419.27 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Surface parameterization is necessary for many graphics tasks: texture-preserving simplification, remeshing, surface painting, and precomputation of solid textures. The

stretch caused by a given parameterization determines the sampling rate on the surface. In this article, we present an automatic parameterization method for segmenting a surface into patches that are then flattened with little stretch.

Many objects consist of regions of relatively simple shapes, each of which has a natu ...

Keywords: Surface parameterization, segmentation, texture mapping, topology

19 Introduction to Bayesian learning

 Aaron Hertzmann

August 2004 **ACM SIGGRAPH 2004 Course Notes SIGGRAPH '04**

Publisher: ACM Press

Full text available:  [pdf\(899.54 KB\)](#) Additional Information: [full citation](#), [abstract](#)

Sophisticated computer graphics applications require complex models of appearance, motion, natural phenomena, and even artistic style. Such models are often difficult or impossible to design by hand. Recent research demonstrates that, instead, we can "learn" a dynamical and/or appearance model from captured data, and then synthesize realistic new data from the model. For example, we can capture the motions of a human actor and then generate new motions as they might be performed by that actor. B ...

20 Image-driven simplification

 Peter Lindstrom, Greg Turk

July 2000 **ACM Transactions on Graphics (TOG)**, Volume 19 Issue 3

Publisher: ACM Press

Full text available:  [pdf\(1.98 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

We introduce the notion of image-driven simplification, a framework that uses images to decide which portions of a model to simplify. This is a departure from approaches that make polygonal simplification decisions based on geometry. As with many methods, we use the edge collapse operator to make incremental changes to a model. Unique to our approach, however, is the use at comparisons between images of the original model against those of a simplified model to determine the ...

Keywords: image metrics, level-of-detail, polygonal simplification, visual perception

Results 1 - 20 of 62

Result page: [1](#) [2](#) [3](#) [4](#) [next](#)

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2007 ACM, Inc.
[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)

Terms used: **swap axis texture**

Found 1 of 204,472

Sort results
by

relevance 

[Save results to a Binder](#)

Try an [Advanced Search](#)

Display
results

expanded form 

[Search Tips](#)

Try this search in [The ACM Guide](#)

[Open results in a new window](#)

Results 1 - 1 of 1

Relevance scale 

1  [Metadata visualization for digital libraries: interactive timeline editing and review](#) 
Vijay Kumar, Richard Furuta, Robert B. Allen
May 1998 **Proceedings of the third ACM conference on Digital libraries DL '98**
Publisher: ACM Press
Full text available:  [pdf\(924.01 KB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

Results 1 - 1 of 1

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2007 ACM, Inc.
[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)



Nothing Found

Your search for **+"swap axes" +texture** did not return any results.

You may want to try an [Advanced Search](#) for additional options.

Please review the [Quick Tips](#) below or for more information see the [Search Tips](#).

Quick Tips

- Enter your search terms in lower case with a space between the terms.

sales offices

You can also enter a full question or concept in plain language.

Where are the sales offices?

- Capitalize proper nouns to search for specific people, places, or products.

John Colter, Netscape Navigator

- Enclose a phrase in double quotes to search for that exact phrase.

"museum of natural history" "museum of modern art"

- Narrow your searches by using a **+** if a search term must appear on a page.

museum +art

- Exclude pages by using a **-** if a search term must not appear on a page.

museum -Paris

Combine these techniques to create a specific search query. The better your description of the information you want, the more relevant your results will be.

museum +"natural history" dinosaur -Chicago

[Search Session History](#)[BROWSE](#)[SEARCH](#)[IEEE XPLOR GUIDE](#)

Edit an existing query or
compose a new query in the
Search Query Display.

Select a search number (#)
to:

- Add a query to the Search Query Display
- Combine search queries using AND, OR, or NOT
- Delete a search
- Run a search

Tue, 26 Jun 2007, 12:30:47 PM EST**Search Query Display** **Recent Search Queries**

#1 (((texture <and> (cube <or> environment <or> environmental <or> reflection) <and> map <and> derivative <and> (axis <or> axes))<in>metadata)

#2 (((texture <and> (cube <or> environment <or> environmental <or> reflection) <and> map <and> (axis <or> axes)))<in>metadata)

[Help](#) [Contact Us](#) [Privacy &](#)

© Copyright 2006 IEEE -

RESULT LIST

0 results found in the Worldwide database for:
axis and texture and switch and coordinate in the title or abstract
(Results are sorted by date of upload in database)

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

0 results found in the Worldwide database for:
axis and texture and swap and coordinate in the title or abstract
(Results are sorted by date of upload in database)

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

0 results found in the Worldwide database for:
axis and texture and flip and coordinate in the title or abstract
(Results are sorted by date of upload in database)

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

0 results found in the Worldwide database for:
axis and texture and invert and coordinate in the title or abstract
(Results are sorted by date of upload in database)

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

0 results found in the Worldwide database for:
axes and texture and invert and coordinate in the title or abstract
(Results are sorted by date of upload in database)

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

0 results found in the Worldwide database for:
axes and texture and swap and coordinate in the title or abstract
(Results are sorted by date of upload in database)

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

0 results found in the Worldwide database for:

axes and texture and switch and coordinate in the title or abstract
(Results are sorted by date of upload in database)

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

0 results found in the Worldwide database for:
axes and texture and flip and coordinate in the title or abstract
(Results are sorted by date of upload in database)

Data supplied from the **esp@cenet** database - Worldwide

Searching PAJ

MENU**NEWS****HELP****Search Results : 4****Index Indication****Clear****Text Search**

If you want to conduct a Number Search, please click on
the button to the right. **Number Search**

Applicant,Title of invention,Abstract --- e.g. computer semiconductor

If you use the AND/OR operation, please leave a SPACE between keywords.

One letter word or Stopwords are not searchable.

change swap switch flip invert

OR**AND**

texture map

AND**AND**

axis axes

OR**AND****Date of publication of application --- e.g.19980401 - 19980405** - **AND****IPC --- e.g. D01B7/04 A01C11/02**

If you use the OR operation, please leave a SPACE between keywords.

Stored data

No. Publication No.	Title
1. <u>2002 - 251629</u>	METHOD FOR EXPRESSING IMAGE AND PROGRAM USED FOR THE SAME
2. <u>2002 - 092636</u>	WATER SURFACE IMAGE FORMING METHOD, COMPUTER-READABLE STORAGE MEDIUM FOR REALIZING IT, AND GAME SYSTEM
3. <u>2002 - 032790</u>	GAME SYSTEM AND INFORMATION STORAGE MEDIUM
4. <u>2000 - 020736</u>	PLOTTING DEVICE AND METHOD THEREFOR

Searching PAJ

MENU**NEWS****HELP****Search Results : 43****Index Indication****Clear****Text Search**

If you want to conduct a Number Search, please click on
the button to the right. **Number Search**

Applicant,Title of invention,Abstract --- e.g. computer semiconductor

If you use the AND/OR operation, please leave a SPACE between keywords.

One letter word or Stopwords are not searchable.

change swap switch flip invert

OR**AND**

texture

AND**AND**

axis axes

OR**AND****Date of publication of application --- e.g.19980401 - 19980405** - **AND****IPC --- e.g. D01B7/04 A01C11/02**

If you use the OR operation, please leave a SPACE between keywords.

**Search****Stored data**

No.	Publication No.	Title
1.	<u>2006 - 333964</u>	GAME MACHINE
2.	<u>2005 - 322097</u>	DEVICE, METHOD AND PROGRAM FOR DISPLAYING ANIMATION OF OBJECT IMAGE MODEL
3.	<u>2005 - 304654</u>	SCRAPING AND WIPING TOOL
4.	<u>2005 - 115768</u>	IMAGE PROCESSING METHOD, APPARATUS, AND SYSTEM, AND IMAGE FORMING APPARATUS, AND IMAGE PROCESSING SYSTEM
5.	<u>2003 - 181046</u>	GAME MACHINE
6.	<u>2003 - 123095</u>	METHOD FOR DISPLAYING WEATHER IN VIDEO GAME MACHINE
7.	<u>2002 - 366297</u>	DEVICE AND METHOD FOR CONTROLLING OPERATION OF APPLIANCE
8.	<u>2002 - 342781</u>	PATTERN SWITCHING SIMULATION SYSTEM
9.	<u>2002 - 251629</u>	METHOD FOR EXPRESSING IMAGE AND PROGRAM USED FOR THE SAME
10.	<u>2002 - 249839</u>	ALLOY COMPOSITION FOR HIGH-DENSITY LONGITUDINAL MAGNETIC RECORDING MEDIUM
11.	<u>2002 - 092636</u>	WATER SURFACE IMAGE FORMING METHOD, COMPUTER-READABLE STORAGE MEDIUM FOR REALIZING IT, AND GAME SYSTEM
12.	<u>2002 - 051705</u>	AGITATING APPARATUS FOR FROZEN DESSERT PRODUCTION UNIT
13.	<u>2002 - 032790</u>	GAME SYSTEM AND INFORMATION STORAGE MEDIUM
14.	<u>2001 - 274016</u>	RARE-EARTH ALLOY FILM MAGNET
15.	<u>2001 - 243499</u>	GAME SYSTEM AND INFORMATION STORAGE MEDIUM
16.	<u>2001 - 209825</u>	REFLECTION IMAGE DISPLAY METHOD, GAME DEVICE AND RECORDING MEDIUM
17.	<u>2000 - 167237</u>	GAME DEVICE AND INFORMATION STORAGE MEDIUM
18.	<u>2000 - 144539</u>	COMPOSITE TEXTURED YARN AND APPARATUS FOR MANUFACTURING THE SAME
19.	<u>2000 - 022185</u>	SOLAR CELL AND ITS MANUFACTURE

20. 2000 - 020736 PLOTTING DEVICE AND METHOD THEREFOR
21. 11 - 083755(1999) FLAW INSPECTING DEVICE
22. 11 - 004850(1999) COMPRESSIVE FORCE MARKER OF BANDAGE
23. 10 - 319155(1998) KNOB FOR CONTROL
24. 10 - 080786(1998) BEAM SPLITTING EQUIPMENT, AND LASER BEAM TEXTURE EQUIPMENT USING IT
25. 09 - 299642(1997) EDGE CONTROL SEWING DEVICE
26. 09 - 187252(1997) FISH MEAT PASTE PRODUCT AND ITS PRODUCTION
27. 09 - 169598(1997) TEXTURED AND MOLDED PARTS HAVING HIGH-TEMPERATURE SUPERCONDUCTIVITY AND THEIR PRODUCTION
28. 09 - 166532(1997) OXIDE FILM REMOVING METHOD
29. 08 - 052618(1996) CUTTER PLATE FOR SINGLE CUTTER REAMER AND METHOD FOR REAMING BORES WITH SUCH CUTTER PLATE
30. 07 - 252762(1995) CONJUGATED ELASTIC HAVING MULTI-STEP ELONGATION PROPERTIES
31. 06 - 288933(1994) METHOD AND DEVICE FOR DETECTING SURFACE FLAW OF SHEET OR THE LIKE
32. 04 - 372844(1992) POLAR-DIAGRAM MEASURING METHOD
33. 04 - 339248(1992) TEXTURE METER
34. 04 - 270901(1992) STROKE SENSOR
35. 02 - 298249(1990) METHOD FOR CARBURIZING SHAFT PROVIDED WITH KEYWAY
36. 02 - 277876(1990) SENSOR FOR TEXTURE ANGLE
37. 01 - 150444(1989) METALLIC FIBER HAVING DIRECTIONAL DENDRITIC STRUCTURE AND PRODUCTION THEREOF
38. 01 - 124454(1989) HAND HELD TYPE UTENSIL FOR MYRINGOTOMY
39. 64 - 058201(1989) MANUFACTURE OF TOP PLATE FOR SANDAL
40. 60 - 110081(1985) TEXTURE PRODUCING SYSTEM
41. 56 - 016163(1981) MAGNETIC BRUSH DEVELOPING UNIT
42. 56 - 008533(1981) STATIC MEASURING METHOD FOR METALLIC TEXTURE
43. 55 - 036643(1980) SPLIT BEARING AND ITS MANUFACTURING METHOD